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## ABSTRACT

In conjunction with a national study on the induction process for beginning vocational teachers, researchers developed a general conceptual framework for the classification and analysis of teacher-related phenomena. The framework, called the Teacher Proximity Continuum, has proved useful in analysis of negative influences, positive influences, significant events, and assistance provided to teachers. Based on functional distance from the teacher, the continuum has been used to classify over 5,000 events and influences up to this point and appears to hold great promise for utility in continuing analysis. Two samples of beginning vocational teachers participated in the study, 12 first-year teachers and 13 third-year teachers. Data for the analysis were collected from the teachers for a year using nominal group technique, interviews, and daily logs. A total of 281 NGT problem statements and 1,777 daily log negative influences were identified. The grouping system that emerged was based on the functional proximity to the teacher. Categories or domains of interest were then developed. The Teacher Proximity Continuum consists of eight domains at five levels of functional distance from the teacher. The five distance levels are personal characteristics, professional skills, interpersonal relationships, educational system, and extra system (outside educational system boundaries). The domains are internal, pedagogy, curriculum, program, peer, student, system, and community. The model was valid for the purpose for which it was used, reliable, and inclusive of the events analyzed. (Five references and a figure describing the Teacher Proximity Continuum are included.) (Author/NLA)

THE TEACHER PROXIMITY CONTINUUM:  
A CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF  
TEACHER-RELATED PHENOMENA

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**THE TEACHER PROXIMITY CONTINUUM:  
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**Abstract**

In conjunction with a national study on the induction process for beginning vocational teachers, the researchers developed a general conceptual framework for the classification and analysis of teacher-related phenomena. The framework, which they call the Teacher Proximity Continuum, has proved useful in analysis of negative influences, positive influences, significant events, and assistance provided to teachers. Based on functional distance from the teacher, the continuum has been used to classify over 5,000 events and influences up to this point and appears to hold great promise for utility in continuing analysis.

The Teacher Proximity Continuum consists of eight domains at five levels of functional distance from the teacher. The five distance levels are personal characteristics, professional skills, interpersonal, educational system, and extra-system. The domains are internal, pedagogy, curriculum, program, peer, student, system, and community.

**THE TEACHER PROXIMITY CONTINUUM:  
A CONCEPTUAL FRAMEWORK FOR THE ANALYSIS OF TEACHER-RELATED  
PHENOMENA**

This research developed from a more general study of the induction process for beginning vocational teachers. As a part of the broader study, our analysis of transcripts of interviews and daily tape-recorded logs, Nominal Group Technique (NGT) sessions, focus group sessions, and other sources produced an enormous amount of data--both qualitative and quantitative. In order to handle such data, we found it necessary to develop a theoretically-sound and empirically-verifiable classification scheme that could be used both as a means of organizing data and as an analytical framework.

As we examined studies in teacher professional development and teacher induction, we found that in each case involving the classification of large numbers of teacher behaviors or characteristics, a different analytical framework was used, as in Veenman's (1984) 24 categories of beginning teacher problems. Thus, we found no generally applicable conceptual framework that seemed to be useful for the categorization or analysis of the kinds of phenomena that were emerging from our research. For the component of the study reported here, our problem was to develop and validate such an analytical framework.

### Theoretical Base

Learning theorists and psychological theorists have long told us that we must look both inward and outward for explanations of human behavior. Consider for instance, the effects on human behavior of external factors such as physical safety and shelter as well as internal factors such as group acceptance and self-actualization. In a classic work on learning theory, Gagne (1965) examined both internal and external conditions for learning, building much of his thinking along the same lines as those of Maslow (1968) who described a more general theory of personality.

In Maslow's (1968) personality theory, human behavior results from motivation which is based directly on the fulfillment of human needs. He describes those needs as being affected by internal factors and internal responses to external factors. Paulus & Nagar (1987) further elaborated on the effect of external forces affecting human personality. They theorized that "physical or functional distance" plays a part in determining the impact of environmental factors on behavior. Stephan (1987), in examining behavior in an intergroup setting, found differences in behavior had multiple "antecedents" that were either situational (setting, group composition), societal (socialization practices, social stratification), or personal (behavior, cognition).

## Methods and Procedures

### Population

At the beginning of the 1988-89 school year, two samples of beginning vocational teachers were purposefully selected to participate in that part of the study which resulted in this paper. One sample consisted of beginning first year teachers, the second of beginning third year teachers. The teachers were selected from a three state area in the South-Eastern United States. A total of 12 first year and 13 third year teachers participated. At the date of the initial data collection, both samples of teachers had been in school for about two to four weeks.

### Data Collection

The two samples of teachers were assembled for nominal group technique (NGT) sessions and individual interviews. For the first year teachers only, each teacher tape-recorded a daily log of responses to a series of specific questions, throughout their first year. During that year, each first year teacher was interviewed three additional times as a part of on-site observations. We worked with the third year teachers only at the group sessions and interviews.

The data for the analysis consisted two parts: the responses to nominal group questions for the beginning first and third year teachers and transcripts of the daily logs of the first year teachers. We chose to analyze the NGT data and

transcripts for teacher "problems" first because the literature is so filled with concerns about problems of beginning teachers.

### Analysis

Compiling the NGT results on the questions concerning "problems" from both groups of teachers, we found that a total of 281 different negative influences had been identified. Over the course of the year, the daily log tapes were transcribed, yielding approximately 15,000 typed pages. Analysis of the transcripts produced anecdotes of 1,777 separate negative influences.

The 281 problem statements resulting from the NGT sessions were typed onto slips of paper. The slips were then sorted independently by two different researchers into logically similar groups. Each of us then verbally labeled and characterized the independently sorted groups of problem statements and compared our intuitive groupings.

After several iterations of this procedure, a grouping scheme based on functional proximity to the teacher began to emerge. The characterizations were compared and the groups were tested against functional proximity to the teacher, ranging from within the teacher to outside the school system. The problem statements were then resorted repeatedly until a consensus was reached. The groupings were then described as categories (which we are calling domains of influences) and placed in an order beginning with the domain functionally most proximate to the



teacher and moving to the domain functionally most distant from the teacher. Each of the domains thus developed was then labeled and defined based both on the proximity to the teacher and on the "real-world" problem statements that were grouped into them. The domain descriptions were submitted to a panel of teacher educators for "validation," and editing.

### **Findings and Conclusions**

#### **Findings**

Having used only the 281 NGT problem statements to develop the analytical framework, we still had the 1,777 problem statements derived from the transcript analysis to use to test the framework. Two different researchers independently classified consecutive samples of 100 problem statements into the previously derived domains. We found that we achieved an initial agreement rate of 95%. We then repeated the 100-item comparison until the inter-rater agreement improved to 99%. The entire set of over 1,777 statements were then classified and we found that almost all of the statements could logically and cleanly fit into single domains. When the original transcripts were examined for details of the precise context, each of the problem statements could be cleanly classified into a single domain.

To determine the generalizability of the conceptual framework, we then used it to analyze 958 positive influences and the 2,073 significant events which by that time had been extracted from the daily logs. In both cases, all of the



anecdotes could be classified cleanly. Since that time we have used the continuum to analyze kinds of assistance beginning teachers receive. We have also used the framework to aid in the analysis of case studies. In all of those settings, the framework has proven to be useful and to provide a means of grouping and analyzing data of either quantitative or qualitative nature.

The Teacher Proximity Continuum consists of eight domains at five levels of functional distance from the teacher. The five distance levels are personal characteristics, professional skills, inter-personal relationships, Intra-system, and extra-system. The domains are internal, pedagogy, curriculum, program, peer, student, system, and community. (See Figure.)

### Conclusions

Teachers work in a whirlwind of activity and stimuli. Vocational teachers are like all other teachers in that regard. There must be any number of ways that phenomena related to the lives of teachers could be grouped for analysis. The model that we developed is based on the source of the phenomenon in relation to its proximity to the teacher. We were able to develop, test, and use a model of eight domains of teacher-related phenomena. We believe the model was valid for the purpose for which it was used, reliable, and inclusive of the events we analyzed.

Valid. We used the first set of problems derived from the NGT sessions to suggest an initial framework. We used the same set of problem statements to derive the model domains, based on

that initial framework. We referred the model to a panel of teacher educators to examine. We used the revised model to classify the second set of problem statements which had been derived from the transcripts of daily teacher logs. We have subsequently used the continuum to classify and analyze a whole range of phenomena. The model is consistent with the literature on human personality and motivation. It is logically and theoretically defensible.

**Reliable.** The initial inter-rater agreement rate for independent classification of problem statements was 95%. After discussion, the agreement rate has stayed around 99%.

**Inclusive.** The model covered the entire wide range of negative influences, positive influences, assistance, and other events. All of the negative influences identified in the nominal group sessions and all of the anecdotes extracted from the transcripts could be classified using the model.

### **Implications and Recommendations**

#### **Implications**

Research on the lives of teachers is an ongoing field of applied research. There is a growing consensus that many aspects of educational research must be discipline-specific to be optimally effective in suggesting appropriate change. It is also apparent that the nature of the educational enterprise changes over time--suggesting that no avenue of educational research is likely ever to be exhausted.

Clearly then, the same teacher-related questions must be answered periodically and in different settings. Yet, we cannot compare results over time in the absence of some common analytical framework. Thus, it is important for future researchers to have an empirically based and theoretically sound analytical framework for examining phenomena related to teachers. This model provides just such a framework.

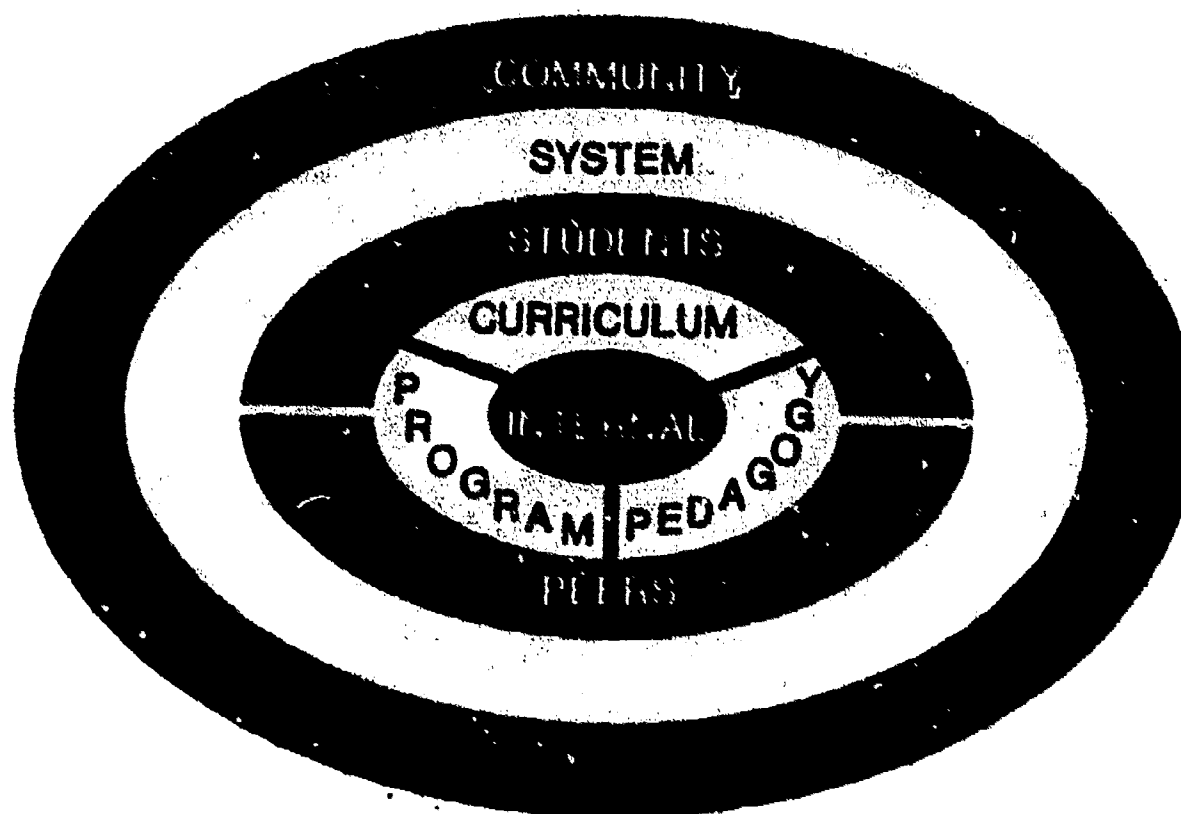
### Recommendations

The conceptual framework should be used by other researchers in other settings where it appears appropriate.

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Figure  
Teacher Proximity Continuum



Domains:	FUNCTIONAL DISTANCE/Description
<b>PERSONAL CHARACTERISTICS</b>	
Internal	Experiences arising from factors within the teacher.
<b>PROFESSIONAL SKILLS</b>	
Pedagogy	Experiences related to the short term planning, delivery, evaluation, and improvement of instruction.
Curriculum	Experiences related to the intermediate term planning of course content and preparation for instruction.
Program	Experiences that arise in conjunction with the long term planning and operation of the department or program.
<b>INTER-PERSONAL RELATIONSHIPS</b>	
Students	Experiences resulting from interactions with students.
Peers	Experiences arising from interactions with persons with co-workers who are neither superior nor subordinate.
<b>INTRA-SYSTEM</b>	
System	Experiences arising from persons and forces within the educational system with which the teacher is required to comply.
<b>EXTRA-SYSTEM</b>	
Community	Experiences arising from outside the administrative and physical bounds of the educational system.